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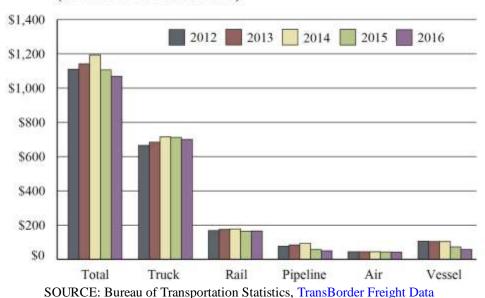
BTS Data

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2016 North American Freight Numbers

Figure 1: U.S.-NAFTA Merchandise Trade by Mode: 2012-2016 (billions of current dollars)



Four out of five major transportation modes – truck, pipeline, vessel and air – carried less U.S. freight and with North American Free Trade Agreement (NAFTA) partners Canada and Mexico by value in 2016 than in 2015. Rail is the only major mode to carry more freight, increasing by 0.2 percent. The total value of cross-border freight carried on all modes fell 3.4 percent from 2015 to \$1.069 trillion in current dollars, according to the U.S. Department of Transportation's Bureau of Transportation Statistics (BTS) (Figure 1 and Table 1).

Freight by Mode

The modal share of commodities moving by truck increased by 1.1 percentage points, rail increased by 0.5 percentage points, and air was unchanged from 2015 to 2016. The modal share of freight on other modes declined: pipeline by 0.5 percentage points and vessel by 1.1 percentage points.

A large drop in the year-over-year price of crude oil in early 2016 played a key role in the annual declines in the dollar value of goods shipped by vessel (down 20.0 percent) and pipeline (down 12.9 percent). By the end of 2016, the year-over-year price of crude oil was increasing. Average monthly prices for crude petroleum and refined fuel are available from the <u>U.S. Energy</u> <u>Information Administration</u>.

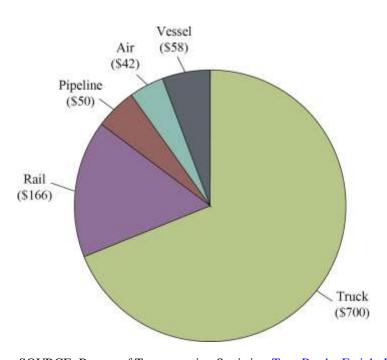


Figure 2: North American Freight on Major Modes, 2016 (billions of current dollars)

SOURCE: Bureau of Transportation Statistics, TransBorder Freight Data

Trucks carried 65.5 percent of U.S.-NAFTA freight, a 1.1 percentage point increase from 2006, and continued to be the most heavily utilized mode for moving goods to and from both U.S.-NAFTA partners. Trucks accounted for \$362.0 billion of the \$572.2 billion of imports (63.3 percent) and for \$338.0 billion of the \$496.9 billion of exports (68.0 percent) (Table 1).

Rail remained the second largest mode, moving 15.5 percent of all U.S.-NAFTA freight, followed by vessel, 5.5 percent; pipeline, 4.6 percent and air, 3.9 percent. The surface transportation modes of truck, rail and pipeline carried 85.6 percent of the total value of U.S.-NAFTA freight flows (Figure 2, Table 1).

Trucks carried 63.3 percent of the \$572.2 billion of imports, followed by rail, 18.8 percent; pipeline, 6.6 percent; vessel, 5.2 percent; and air, 3.1 percent. Truck carried 68.0 percent of the \$496.9 billion of exports, followed by rail, 11.7 percent; vessel, 5.8 percent; air, 4.8 percent; and pipeline, 2.4 percent (Table 1).

The category of all modes of transportation cited in the following tables includes freight movements by truck, rail, vessel, pipeline, air, other and unknown modes of transport. See North American Transborder Freight Data for historical data.

Freight with Canada

From 2015 to 2016, the value of U.S.-Canada freight flows fell 5.4 percent to \$544.0 billion. Trucks carried 60.1 percent of the value of the freight to and from Canada, followed with rail by 16.2 percent; pipeline by 8.4 percent, vessel by 3.3 percent; and air by 4.8 percent. The surface transportation modes of truck, rail and pipeline carried 84.8 percent of the value of total U.S.-Canada freight flows (Table 2).

Trucks carried 60.1 percent of U.S.-Canada freight in 2016, a 1.3 percentage point increase from 2006. Rail and air both had a percent share gain of 0.2 points, while vessel's share fell 0.6 points and pipeline's share fell 2.1 points (Table 2).

Trucks carried 53.5 percent of the \$278.1 billion of 2016 imports from Canada, followed by rail, 21.1 percent; pipeline, 13.6 percent; vessel, 4.1 percent; and air, 4.0 percent. Truck carried 67.1 percent of the \$266.0 billion of 2016 exports to Canada, followed by rail, 11.2 percent; air, 5.6 percent; pipeline, 3.0 percent; and vessel, 2.5 percent (Table 2).

Michigan led all states in freight with Canada in 2016 with \$71.8 billion, and increase of 3.9 percent. The other top 10 states for U.S.-Canada freight in 2016 all showed year-over-year decreases, Indiana had the smallest percent decrease over 2015 by 0.3 percent. Texas had the largest percent decrease over 2015 among the top 10 states, by 15.0 percent (Table 3).

The top commodity category transported between the U.S. and Canada in 2016 was vehicles and parts at \$106.1 billion with \$59.8 billion or 56.4 percent moving by truck (Figure 3).

Freight with Mexico

From 2015 to 2016, the value of U.S.-Mexico freight fell 1.1 percent to \$525.1 billion. Trucks carried 71.0 percent of the value of the freight to and from Mexico, followed with rail by 14.7 percent; vessel by 7.7 percent; air by 3.0 percent; and pipeline by 0.7 percent. The surface transportation modes of truck, rail and pipeline carried 86.4 percent of the value of total U.S.-Mexico freight flows (Table 4).

Trucks carried 71.0 percent of U.S.-Mexico freight in 2016, a 5.0 percentage point increase from 2006. Rail's share increased by 1.7 percentage points from 2006, while pipeline's share increased by 0.5 percentage points, air's share declined by 0.5 percentage points and vessel's percentage share fell 7.0 points (Table 4).

Trucks carried 72.5 percent of the \$294.2 billion of 2016 imports from Mexico, followed by rail, 16.5 percent; vessel, 6.2 percent; air, 2.4 percent; and pipeline, 0.1 percent. Truck carried 69.1 percent of the \$231.0 billion of 2016 exports to Mexico, followed by rail, 12.4 percent; vessel, 9.6 percent; air, 3.8 percent; and pipeline, 1.6 percent (Table 4).

Texas led all states in freight with Mexico in 2016 with \$173.7 billion. Of the top 10 states for U.S.-Mexico freight in 2016, Michigan had the highest percent change over 2016, increasing by 11.0 percent (Table 5).

The top commodity transported between the U.S. and Mexico in 2016 was electrical machinery at \$102.6 billion, with \$94.0 billion or 91.6 percent moved by truck. The next highest commodity category transported by a single mode in U.S.-Mexico freight was vehicles and parts with \$43.7 billion in freight moved by rail (Figure 4).

Reporting Notes

Statistical releases and the BTS website define surface transportation modes as truck, rail and pipeline. See North American TransBorder Freight Data on the BTS website for additional data for surface modes since 1995 and all modes since 2004. The category for all modes of transportation cited in the following tables includes freight movements by truck, rail, vessel, pipeline, air, other and unknown modes of transport.

Data in this press release are not adjusted for inflation. Additional summary data adjusted for inflation and exchange rates can be found on the BTS website under <u>TransBorder Indexed</u> <u>Freight Flow Data</u>. The BLS indexes used in the adjustments for inflation and exchange rates may be revised in each of the three months after original publication. For more information, see <u>TransBorder Releases</u> for previous releases and summary tables. BTS has scheduled the release of January TransBorder numbers for March 23.

Table 1. Modal Shares of U.S.-NAFTA Freight Flows Freight by All Modes

(millions of current dollars)

Mode		2006	2015	2016	Percent Change 2006-2016	Percent Change 2015-2016
All Modes	Imports	501,675	589,931	572,218	14.1	-3.0
	Exports	364,424	516,394	496,920	36.4	-3.8
Modec	Total	866,099	1,106,325	1,069,138	23.4	-3.4
Share of Total by Mode (percent of total value)					Percentage Point Change 2006-2016	Percentage Point Change 2015-2016
All	Imports	83.6	87.3	88.7	5.1	1.3
Surface	Exports	82.3	81.1	82.1	-0.2	1.0
Modes	Total	83.1	84.4	85.6	2.5	1.2
	Imports	55.1	61.0	63.3	8.2	2.3
Truck	Exports	70.6	68.2	68.0	-2.6	-0.1
	Total	61.6	64.3	65.5	3.9	1.1
	Imports	17.8	18.4	18.8	1.0	0.4
Rail	Exports	10.9	11.0	11.7	0.8	0.7
	Total	14.9	14.9	15.5	0.6	0.5
	Imports	10.7	8.0	6.6	-4.1	-1.3
Pipeline	Exports	0.8	1.9	2.4	1.6	0.4
	Total	6.6	5.2	4.6	-1.9	-0.5
Vessel	Imports	11.0	6.4	5.2	-5.8	-1.2
	Exports	4.1	6.8	5.8	1.7	-1.0
	Total	8.1	6.6	5.5	-2.6	-1.1
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Δ	Imports	2.5	3.0	3.1	0.6	0.2
Air	Exports	6.4	5.0	4.8	-1.6	-0.2
	Total	4.1	3.9	3.9	-0.2	0.0

Source: Bureau of Transportation Statistics, <u>TransBorder Freight Data</u> as of February 2017. NOTES: Numbers might not add to totals due to rounding. Percent changes based on numbers prior to rounding. The value of trade for all modes is not equal to the sum of truck, rail, pipeline, vessel and air modes, it also includes shipments made by mail, foreign trade zones, and other transportation.

^{*} The percent of modal share for all surface modes equals the sum of the share of the truck, rail and pipeline modes.

Table 2. Modal Shares of U.S.-Canada Freight Flows Freight by All Modes

(millions of current dollars)

Mode		2006	2015	2016	Percent Change 2006-2016	Percent Change 2015-2016
	Imports	303,416	295,190	278,067	-8.4	-5.8
All Modes	Exports	230,257	280,017	265,961	15.5	-5.0
Modes	Total	533,673	575,207	544,027	1.9	-5.4
	Share of Total by Mode (percent of total value)				Percentage Point Change 2006-2016	Percentage Point Change 2015-2016
All	Imports	88.0	86.7	88.2	0.2	1.6
Surface	Exports	82.1	79.7	81.2	-0.8	1.5
Modes	Total	85.4	83.3	84.8	-0.6	1.5
	Imports	49.4	49.7	53.5	4.1	3.8
Truck	Exports	71.4	67.3	67.1	-4.3	-0.2
	Total	58.9	58.3	60.1	1.3	1.9
	Imports	20.8	21.1	21.1	0.3	0.0
Rail	Exports	9.8	10.1	11.2	1.4	1.1
	Total	16.1	15.7	16.2	0.2	0.5
	Imports	17.8	15.8	13.6	-4.2	-2.3
Pipeline	Exports	0.9	2.3	3.0	2.1	0.7
	Total	10.5	9.3	8.4	-2.1	-0.9
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	Imports	5.3	5.1	4.1	-1.2	-1.0
Vessel	Exports	2.2	4.6	2.5	0.3	-2.1
	Total	4.0	4.9	3.3	-0.6	-1.6
۸:-	Imports	2.8	3.7	4.0	1.2	0.3
Air	Exports Total	6.9 4.6	5.7 4.7	5.6 4.8	-1.3 0.2	-0.1 0.1
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Source: Bureau of Transportation Statistics, <u>TransBorder Freight Data</u> as of February 2017.

NOTES: Numbers might not add to totals due to rounding. Percent changes based on numbers prior to rounding. The value of trade for all modes is not equal to the sum of truck, rail, pipeline, vessel and air modes, it also includes shipments made by mail, foreign trade zones, and other transportation.

^{*} The percent of modal share for all surface modes equals the sum of the share of the truck, rail and pipeline modes.

Table 3. Top 10 States Freight Flows with Canada by All Modes of Transportation

Ranked by 2016 Value

(millions of current dollars)

	2015		2016		Percent
State	Value	Rank	Value	Rank	Change 2015 - 2016
Michigan	69,059	1	71,754	1	3.9
California	44,783	2	43,964	2	-1.8
Illinois	47,166	4	41,180	3	-12.7
Texas	41,311	3	35,101	4	-15.0
Ohio	33,913	5	30,601	5	-9.8
New York	30,413	6	30,262	6	-0.5
Pennsylvania	22,302	8	19,942	7	-10.6
Washington	21,548	7	19,791	8	-8.2
Indiana	18,819	9	18,757	9	-0.3
Tennessee	14,406	10	13,842	10	-3.9

Source: Bureau of Transportation Statistics, <u>TransBorder Freight Data</u> as of February 2017. NOTE: Percent change based on numbers prior to rounding.

Table 4. Value of U.S.-Mexico Freight Flows by Mode of Transportation

(millions of current dollars)

Mode		2006	2015	2016	Percent Change 2006-2016	Percent Change 2015-2016
	Imports	198,259	294,741	294,151	48.4	-0.2
All Modes	Exports	134,167	236,377	230,959	72.1	-2.3
	Total	332,426	531,118	525,110	58.0	-1.1
	Share of Total by Mode (percent of total value)			Percentage Point Change 2006-2016	Percentage Point Change 2015-2016	
All	Imports	76.9	82.9	89.1	12.2	6.1
Surface	Exports	82.7	81.3	83.1	0.4	1.8
Modes	Total	79.2	82.2	86.4	7.2	4.2
	Imports	63.8	67.9	72.5	8.7	4.6
Truck	Exports	69.3	67.0	69.1	-0.2	2.1
	Total	66.0	67.5	71.0	5.0	3.5
	Imports	13.0	15.0	16.5	3.5	1.5
Rail	Exports	12.9	12.3	12.4	-0.5	0.1
	Total	13.0	13.8	14.7	1.7	0.9
	Imports	0.0	0.1	0.1	0.0	0.0
Pipeline	Exports	0.5	2.0	1.6	1.1	-0.4
	Total	0.2	0.9	0.7	0.5	-0.2
	Imports	19.6	7.7	6.2	-13.5	-1.5
Vessel	Exports	7.5	9.4	9.6	2.1	0.2
	Total	14.7	8.5	7.7	-7.0	-0.8
	Imports	2.1	2.2	2.4	0.3	0.1
Air	Exports	5.5	4.1	3.8	-1.7	-0.4
	Total	3.5	3.1	3.0	-0.5	-0.1

Source: Bureau of Transportation Statistics, TransBorder Freight Data as of February 2017.

NOTES: Numbers might not add to totals due to rounding. Percent changes based on numbers prior to rounding. The value of trade for all modes is not equal to the sum of truck, rail, pipeline, vessel and air modes, it also includes shipments made by mail, foreign trade zones, and other transportation.

^{*} The percent of modal share for all surface modes equals the sum of the share of the truck, rail and pipeline modes.

Table 5. Top 10 States Freight Flows with Mexico by All Modes of Transportation

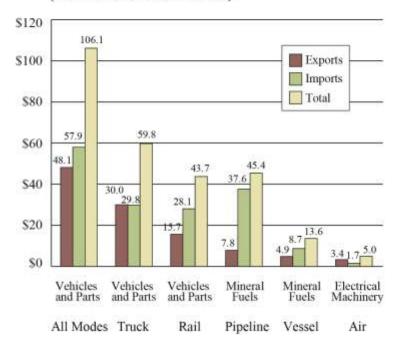
Ranked by 2016 Value (millions of current dollars)

	2015		2016		Percent
State	Value	Rank	Value	Rank	Change 2015 - 2016
Texas	177,997	1	173,711	1	-2.4
California	71,889	2	71,624	2	-0.4
Michigan	55,009	3	61,087	3	11.0
Illinois	22,195	4	21,214	4	-4.4
Arizona	16,760	5	15,777	5	-5.9
Ohio	14,683	6	14,416	6	-1.8
Tennessee	11,995	7	11,788	7	-1.7
Georgia	9,732	9	9,991	8	2.7
Indiana	10,059	10	9,380	9	-6.8
Florida	8,266	10	8,614	10	4.2

Source: Bureau of Transportation Statistics, <u>TransBorder Freight Data</u> as of February 2017.

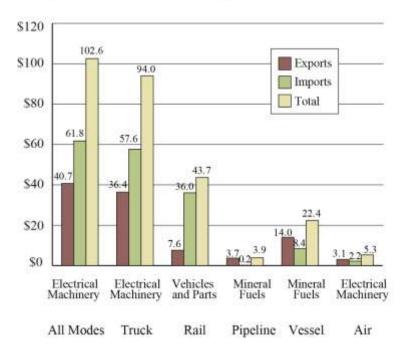
NOTE: Percent change based on numbers prior to rounding.

Figure 3. Top Commodity Transported between the U.S. and Canada for Each Mode of Transportation, 2016 (billions of current dollars)



Source: Bureau of Transportation Statistics, <u>TransBorder Freight Data</u> as of February 2017. NOTES: Numbers might not add to totals due to rounding. Percent changes based on numbers prior to rounding. The value of trade for all modes is not equal to the sum of truck, rail, pipeline, vessel and air modes, it also includes shipments made by mail, foreign trade zones, and other transportation.

Figure 4. Top Commodity Transported between the U.S. and Mexico for Each Mode of Transportation, 2016 (billions of current dollars)



Source: Bureau of Transportation Statistics, <u>TransBorder Freight Data</u> as of February 2017. NOTES: Numbers might not add to totals due to rounding. Percent changes based on numbers prior to rounding. The value of trade for all modes is not equal to the sum of truck, rail, pipeline, vessel and air modes, it also includes shipments made by mail, foreign trade zones, and other transportation.